1 VQE results Aer Estimator (With Shots)

(Full Hamiltonian) Harmonic Oscillator $\Lambda = 8$ COYBLA Max 10k Iterations

Ansatz	Tolerance	Shots	Converged runs	Mean iter	VQE min E.	σ_{min}	Δ_{min}	VQE median E.	Δ_{median}	Exact	Time
RA r1 rl	1e−01	10000	100/100	62	1.4e−03	5.6558e−04	1.4e−03	2.01e−02	2.01e−02	0e+00	00h 07m 36s
RA r1 rl	1e−01	10000	100/100	62	1.4e−03	5.6558e−04	1.4e−03	2.01e−02	2.01e−02	-	00h 07m 36s
RA r1 rl	1e−02	10000	100/100	81	3e−04	2.9995e−04	3e−04	5.35e−03	5.35e−03	-	00h 09m 40s
RA r1 rl	1e−03	10000	100/100	101	1e−04	9.9995e−05	1e−04	7e−03	7e−03	-	00h 11m 48s
RA r1 rl	1e−04	10000	100/100	118	6e−04	3.9997e−04	6e−04	6.25e−03	6.25e−03	-	00h 13m 43s
RA r1 rl	1e−05	10000	100/100	130	2e−04	1.9999e−04	2e−04	8.5e−03	8.5e−03	-	00h 13m 18s
RA r1 rl	1e−06	10000	100/100	144	4e−04	1.9999e−04	4e−04	7.6e−03	7.6e−03	-	00h 13m 57s
RA r1 rl	1e−07	10000	100/100	164	2e−04	2.4492e−04	2e−04	6.05e−03	6.05e−03	-	00h 14m 04s
RA r1 rl	1e−08	10000	100/100	177	2e−04	1.9999e−04	2e−04	6.2e−03	6.2e−03	-	00h 14m 03s
Ansatz	Tolerance	Shots	Converged runs	Mean iter	VQE min E.	σ_{min}	Δ_{min}	VQE median E.	Δ_{median}	Exact	Time

Table 1